

I claim:

1. A disposable dental syringe kit, for use with a double ended dental needle comprising a needle extending through an attachment portion, said kit comprising:
  - a flexible conduit comprising a proximal end and a distal end;
  - a needle handle connected to said flexible conduit proximate said distal end, said needle handle comprising a distal bore for receiving the proximate end of a double ended needle, a connector for connecting an attachment portion of a double ended needle to the needle handle thereby placing the flexible conduit in fluidic communication with a needle, and a pierceable seal through which a needle is placed when connecting a double ended needle to said needle handle.
2. A disposable syringe kit according to claim 1 wherein said seal comprises a rubber-like material.
3. A disposable syringe kit according to claim 2 wherein said seal is generally cylindrical.
4. A disposable syringe kit according to claim 2 wherein said seal is generally ovoid.
5. A disposable syringe kit according to claim 2 wherein said seal is generally rectangular.

6. A disposable syringe kit according to claim 2 wherein said seal is generally flat.
7. A disposable dental syringe kit according to claim 2 wherein said seal is snugly received in a recess in said needle handle which forms an interference fit with said seal.
8. A disposable syringe kit according to claim 3 wherein said seal is secured to said needle handle with an adhesive.
9. A disposable syringe kit according to claim 8 wherein said adhesive is soluble in dental anesthetic.
10. A disposable syringe kit according to claim 1 wherein said seal is generally cylindrical.
11. A disposable syringe kit according to claim 1 wherein said seal is generally ovoid.
12. A disposable syringe kit according to claim 1 wherein said seal is generally rectangular.
13. A disposable syringe kit according to claim 1 wherein said seal is generally flat.
14. A disposable syringe kit according to claim 1 wherein said seal is secured to said needle handle with an adhesive.

15. A disposable syringe kit according to claim 8 wherein said adhesive is soluble in local dental anesthetic.

16. A disposable syringe kit according to claim 1 wherein said connector comprises a resilient sloped surface which is contacted by an attachment portion of a double ended needle during attachment of a double ended needle to said needle handle.

17. A disposable syringe kit according to claim 16 wherein at least a portion of said needle handle is compressed during attachment of a double ended needle to said needle handle.

18. A disposable syringe kit according to claim 16 wherein a portion of said needle handle adjacent said seal is compressed during attachment of a double ended needle to said needle handle.

19. A disposable syringe kit according to claim 16 comprising at least one recess adjacent said seal.

20. A disposable syringe kit according to claim 19 comprising at least two recesses adjacent said seal.

21. A disposable syringe kit according to claim 19 wherein said seal is located in at least a portion of said recess.

22. A disposable syringe kit according to claim 1 wherein said distal bore extends proximally through said needle handle at least to a point proximal of the distal-most portion of said recess.
23. A disposable syringe kit according to claim 1 wherein said connector comprises threads.
24. A disposable syringe kit according to claim 1 further comprising a handle extension removably attached to said needle handle.
25. A disposable syringe kit according to claim 1 comprising a guide comprising a bore, said guide disposed distally of said seal.
26. A disposable syringe kit according to claim 1 wherein said guide is removable positioned at least partially in said needle handle.
27. A disposable syringe kit according to claim 1 wherein said guide is removably positioned with an interference fit.
28. A disposable syringe kit according to claim 1 wherein said guide is secured to said needle handle.

29. A disposable syringe kit according to claim 1 wherein said guide is secured to said needle handle with an adhesive.

30. A disposable dental syringe kit comprising:  
a flexible conduit comprising a proximal end and a distal end;  
a needle handle connected to a said flexible conduit proximal said distal end, and  
a handle extension removably attached to said needle handle.

31. A disposable dental syringe kit according to claim 30 wherein said handle extension is removably connected to a proximal portion of said needle handle.

32. A disposable dental syringe kit according to claim 30 wherein said handle extension is threadably connected to said needle handle.

33. A disposable dental syringe kit according to claim 30 wherein said handle extension is connected to said needle handle by sliding said handle extension over a portion of said needle handle.

34. A disposable dental syringe kit according to claim 30 wherein said handle extension comprises a hollow portion which forms an interference fit with a portion of said needle handle.

35. A disposable dental syringe kit according to claim 30 wherein said needle handle comprises a hollow portion which forms an interference fit with a portion of said handle extension.

36. A dental injection apparatus comprising:

    a delivery head for pumping anesthetic from a disposable cartridge of dental anesthetic, said cartridge comprising a piston and said delivery head comprising a movable plunger for moving said piston;

    a cartridge holster adapted to receive a disposable cartridge of dental anesthetic, said delivery head comprising a bracket for securely and releasably connecting said cartridge holster to said delivery head.

37. A dental injection apparatus according to claim 36 wherein at least a portion of said bracket extends a sufficient distance from said plunger so that a major portion of said cartridge holster can be positioned substantially between a portion of said bracket and said plunger prior to pumping.

38. A dental injection apparatus according to claim 36 wherein said bracket comprises a wire.

39. A dental injection apparatus according to claim 38 wherein said wire is a coated wire.

40. A dental injection apparatus according to claim 38 wherein said bracket comprises a metal.

41. A dental injection apparatus according to claim 38 wherein said bracket comprises stainless steel.

42. A dental injection apparatus according to claim 38 wherein said bracket comprises a polymeric material.

43. A dental injection apparatus according to claim 38 wherein said bracket comprises a reinforced polymeric material.

44. A dental injection apparatus comprising:

    a delivery head for pumping anesthetic from a disposable cartridge of dental anesthetic, said cartridge comprising a piston and said delivery head comprising a movable plunger for moving said piston;

    a cartridge holster adapted to receive a disposable cartridge of dental anesthetic, said cartridge holster comprising a base with an outer surface comprising a polygonal cross section;

    said delivery head comprising a recess for securely and releasably connecting said holster base to said delivery head.

45. A dental injection apparatus according to claim 44 wherein said outer surface of said holster comprises a generally square cross section and said deliver head comprises a square opening and a plurality of slots which engage a plurality of the corners of said holster base to securely and releasably connect said holster to said delivery head.